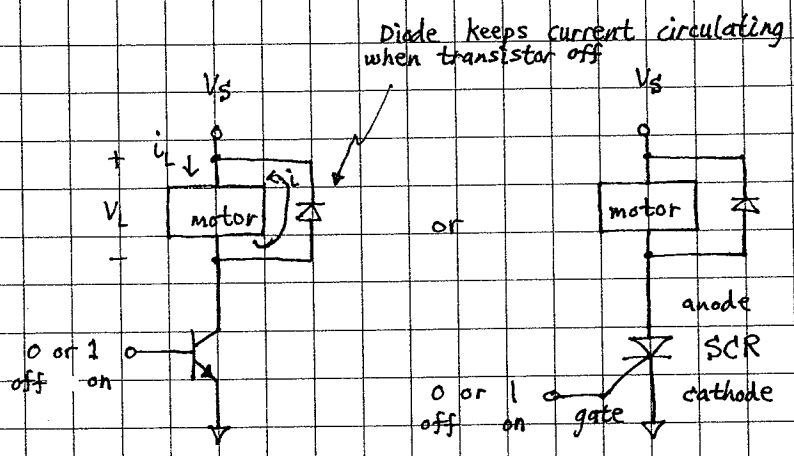
Switching Electronics

- Use switching device (e.g., transistor or SCR) that acts ≈ short when turned on.

- To minimize power loss in switch, use in situation where applying V step = V_S to load is possible, (without having $i_L \to \infty$).

In particular, if load = L we can apply step V. If load = C we cannot apply step V, (as that would imply $i = \infty$).

Conclusion: switching circuits are effective for motors.



- When transistor SCR is on, it acts like a closed switch (with $R \approx 0\Omega$).

- SCR acts like a self latching relay. Turn on SCR with current pulse on gate terminal, and it stays on as long as voltage drop from anode to cathode is positive.